

Hunters Pt NBC questions 6-6-2016

Below are answers to your follow-up questions about EPA's oversight role and the cleanup standards used at Hunters Point Naval Shipyard (HPNS).

EPA helps protect human health and the environment by managing the cleanup of hazardous waste sites across the nation. In the case of former military sites, such as HPNS, the Department of Defense is the lead for the investigation and cleanup. In overseeing the Navy's cleanup of Hunters Point, EPA's goal is to ensure that the community is protected from exposure to radiation and that the site can be used for work, recreation, and residential purposes.

Because the Navy is the lead for HPNS, EPA suggested that NBC Investigative News direct its request for an on-camera interview to the Navy. EPA has provided written information about its oversight role and remains willing to answer follow-up questions.

You asked about the Navy's reference to a 25 millirem per year standard. EPA does not express cleanup standards in terms of millirem per year, which is a dose-based approach, but instead evaluates protectiveness in terms of risk. Even though the Navy's documents reflect a dose-based approach, EPA in its oversight capacity independently reviews the Navy's cleanup reports to make sure that radiation levels are within the protective 10^{-4} to 10^{-6} cancer risk range. EPA has confirmed that the Navy's cleanup meets EPA standards.

Regarding averaging across the site, the actual exposure from radionuclides is based on looking at concentrations from multiple locations across an area, not from just a single point. Therefore, EPA is using the standard approach in the "Multi-Agency Radiation Survey and Site Investigation Manual" (MARSSIM). This approach is widely used by multiple agencies, including EPA.

The protective cover is a part of the cleanup that is required throughout the HPNS. The cover provides a physical barrier that can consist of asphalt, a soil cap at least two feet thick, or a concrete building foundation.

The EPA's risk model is called the Preliminary Remediation Goal (PRG) Calculator. More information about this model is available at this website: <https://epa-prgs.ornl.gov/radionuclides/>